REMARKS

The above amendments have been made to place the application in a more traditional format. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "**Version With Markings To Show Changes Made**."

Respectfully submitted,

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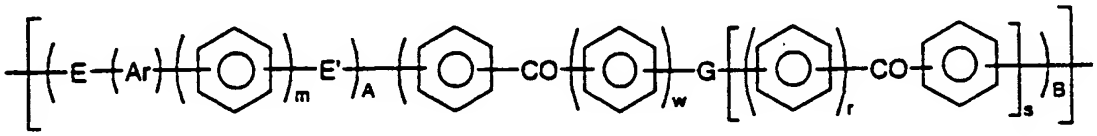
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

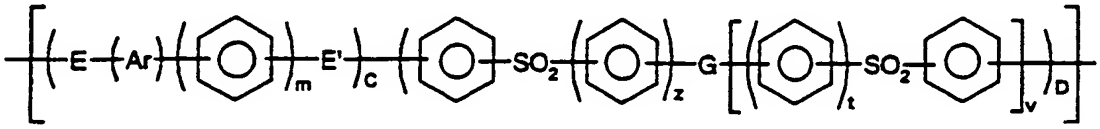
3. (Amended) A membrane according to claim 1 [or claim 2], wherein said first conductive polymer is crystalline.

4. (Amended) A membrane according to [any preceding claim] claim 1, wherein said polymer is a homopolymer having a repeat unit of general formula



IV

or a homopolymer having a repeat unit of general formula



V

or a random or block copolymer of at least two different units of IV and/or V

wherein A, B, C and D independently represent 0 or 1.

5. (Amended) A membrane according to [any preceding claim] claim 1, wherein said first conductive polymer includes at least some ketone moieties in

the polymeric chain.

6. (Amended) A membrane according to [any preceding claim] claim 1, wherein said first conductive polymer is a copolymer comprising a first repeat unit which is selected from the following:

(a) a unit of formula IV wherein E and E' represent oxygen atoms, G represents a direct link, Ar represents a represents a moiety of structure (iv), m and s represent zero, w represent 1, A and B represent 1;

(b) a unit of formula IV wherein E represents an oxygen atom, E' represents a direct link, Ar represents a moiety of structure (i), m represents zero, A represents 1, B represents zero;

(c) a unit of formula V wherein E and E' represent oxygen atoms, G represents a direct link, Ar represents a moiety of structure (iv), m and v represent zero, z represents 1 and C and 0 represent 1;

(d) a unit of formula V wherein E represents an oxygen atom, E' represents a direct link, Ar represents a moiety of structure (ii), m represents 0, C represents 1, D represents 0; or

(e) a unit of formula V wherein E and E' represents an oxygen atom, Ar represents a structure (i), m represents 0, C represents 1, Z represents 1, G represents a direct link, v represents 0 and D represents 1;

and a second repeat unit which is selected from the following:

(f) a unit of formula IV wherein E and E' represent oxygen atoms, G

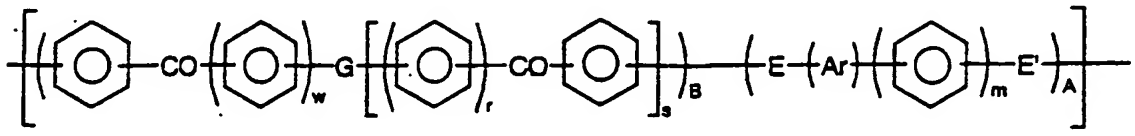
represents a direct link, Ar represents a moiety of structure (iv), m represents 1, w represents 1, s represents zero, A and B represent 1;

(g) a unit of formula IV wherein E represents an oxygen atom, E' is a direct link, G represents a direct link, Ar represents a moeity of structure (iv), m and s represent zero, w represent 1, A and B represent 1;

(h) a unit of formula V wherein E and E' represent oxygen atoms, G represents a direct link, Ar represents a moiety of structure (iv), m represents 1, z represents 1, v represents 0, C and D represent 1; and

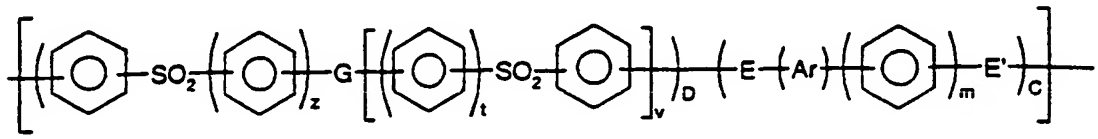
(i) a unit of formula V wherein E represents an oxygen atom, E' represents a direct link, G represents a direct link,. Ar represents a moiety of structure (iv), m and v represent zero, z represents 1, C and D represent 1;

8. (Amended) A membrane according to [any preceding claim] claim 1, wherein said first conductive polymer is a homopolymer having a repeat unit of general formula



IV*

or a homopolymer having a repeat unit of general formula



V*

or a random or block copolymer of at least two different units of IV* and.or

V* wherein A, B, C and D independently represent 0 or 1.

9. (Amended) A membrane according to [any preceding claim] claim 1, wherein said first conductive polymer includes a biphenylene moiety.

10. (Amended) A membrane according to [any preceding claim] claim 1, wherein said first conductive polymer includes a -O--biphenylene-O-moiety.

11. (Amended) A membrane according to [any preceding claim] claim 1, wherein a film of said conductive polymer is laminated to the support material.

12. (Amended) A membrane according to [any of claims 1 to 10] claim 1, wherein the support material is porous and said conductive polymer is impregnated in the support material.

13. (Amended) A membrane according to [any preceding claim] claim 1, wherein said support material comprises a polymer having a moiety of formula I, II and/or III as described in [any preceding claim] claim 1 except that the polymer of the support material is either not sulphonated (or otherwise functionalised to provide ion-exchange sites) or is only sulphonated (or otherwise functionalised to provide ion—exchange sites) at or in the region of the surface of the support material.

14. (Amended) A membrane according to [any preceding claim] claim 1, wherein said support material is selected from the following homopolymers of formula IV as shown in claim 4:

- E and E' represent oxygen atoms, G represents a direct link, Ar represents a moiety of structure (iv), m and s represent zero, w represents 1 and A and B

represent 1

- E represents an oxygen atom, E' represents a direct link, Ar represents a moiety of structure (i), m represents zero, A represents 1, B represents zero

- Ar represents a moiety (iv), E and E' represent oxygen atoms, G represents a direct link, m represents 0, w represents 0, s represents 1, r represents 1 and A and B represent 1.

- Ar represents a structure (i)*, E represents an oxygen atom, E' represents a direct link, m represents 0, A represents 1, B represents 0.

- Ar represents moiety (i), E and E' represent oxygen atoms, G represents a direct link, m represents zero, w represents 1, r represents 0, s represents 1 and A and B represent 1

- Ar represent moiety (iv); E represents a sulphur atom, m represents 0, E' represents a direct link and B represents 0;

or is selected from:

- a homopolymer of formula V wherein E represents an oxygen atom, E' represents a direct link, Ar represents a moiety of structure (ii), m represents 0, C represents 1, D represents 0; and is selected from:

- polysulphone for example comprising a homopolymer of formula V wherein E and E' represent oxygen atoms, m represents zero, C and D represent 1, z represents 1, G represents a direct link, v represents zero and Ar represents a moiety of structure:

15. (Amended) A membrane according to [any preceding claim] claim 1, wherein said first conductive polymer has an equivalent weight (EW) of less than 800g/mol, preferably less than 500 g/mol.

17. (Amended) A fuel cell or electroylser incorporating a composite membrane according to [any preceding claim] claim 1.

18. (Amended) A method of making a composite membrane according to [any of claims 1 to 16] claim 1, the method comprising causing a conductive polymer as described [in any of claims 1 to 16] above to be associated with a support material as described [in any of claims 1 to 16] above.

20. (Amended) A method according to claim 18 [or claim 19], wherein a first solvent formulation comprises a polar aprotic solvent in which a conductive polymer is provided and said support material is a material (e.g. a polyetheretherketone fabric or a polyetherketone microporous membrane) which is not soluble in said polar aprotic solvent, wherein the method includes a step of contacting said support material with said first solvent formulation.

21. (Amended) A method according to claim 18 [or claim 19], wherein said support material is a fabric and the method includes a step of contacting the fabric with a first solvent formulation comprising a first solvent and said conductive polymer, wherein said first solvent and said support material are

selected so that the first solvent solubilizes a surface of the support material.

24. (Amended) A method according to claim 18 [or claim 19], the method including:

contacting said support material with a solvent formulation comprising a first solvent which solubilizes the support material; and

contacting the support material with a second solvent to cause phase inversion and render said support material porous.